



Protecting Healthcare Workers During the COVID-19 Pandemic:

A Survey of Infection Preventionists

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About the Survey

During the COVID-19 crisis, the role of the infection preventionist (IP) as a coach and mentor in our nation's healthcare facilities has never been more important. It's the job of the IP to make sure healthcare workers practice proper hand hygiene and follow every step needed to deliver safe patient care. But without the right equipment, IPs can't protect healthcare workers from getting sick on the job. We are asking our healthcare colleagues to risk their own health and their families' health during COVID-19. Having adequate personal protective equipment (PPE) is essential to preventing the spread of infection and keeping our healthcare colleagues safe.

The Association for Professionals in Infection Control and Epidemiology conducted this survey because we are concerned about the lack of PPE in our nation's healthcare facilities and we care about the safety of our colleagues. Immediate action is necessary to protect healthcare workers and save lives. The federal government must act now to secure more critical supplies and coordinate distribution to where it is most needed. We cannot wait any longer.

The survey report provides insight into the current availability of PPE and cleaning and disinfection supplies in healthcare settings during the COVID-19 pandemic. The intent is to help inform stakeholders on areas where attention is needed to address the health and safety needs of healthcare workers and patients across the country during this critical time.

APIC distributed a 7-question online survey to its 11,922 U.S.-based infection preventionist members on Monday, March 23, 2020. The survey concluded on Wednesday, March 25, 2020.

Results from this survey are based on responses from 1,141 infection preventionists throughout the United States.

Cumulative Results

State

Respondents represent all 50 states and the District of Columbia.

Texas	66
New York	62
Pennsylvania	62
California	60
Minnesota	46
Wisconsin	46
Florida	39
Illinois	36
Kansas	36
Michigan	33
Missouri	32

Ohio	29
Georgia	27
Colorado	25
Iowa	25
North Carolina	25
Tennessee	25
Indiana	24
Kentucky	24
New Jersey	24
Washington	23
Alabama	22
Connecticut	20
Louisiana	20
Massachusetts	20

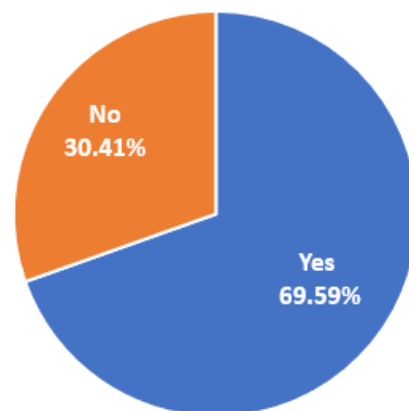
Maryland	19
Mississippi	19
Arkansas	16
Idaho	16
Nebraska	15
Oklahoma	15
Virginia	14
Arizona	13
Montana	13
North Dakota	13
South Carolina	13
Utah	13
New Mexico	11
West Virginia	11

Nevada	9
Oregon	8
Maine	7
South Dakota	7
Delaware	5
Hawaii	5
Rhode Island	4
Wyoming	4
District of Columbia	3
New Hampshire	3
Alaska	2
Vermont	2
Armed Forces Americas	1
Armed Forces Pacific	1
No selection	28

Do you oversee infection prevention and control for a healthcare system?

Nearly 70 percent of respondents were responding on behalf of a healthcare system, rather than an individual healthcare facility.

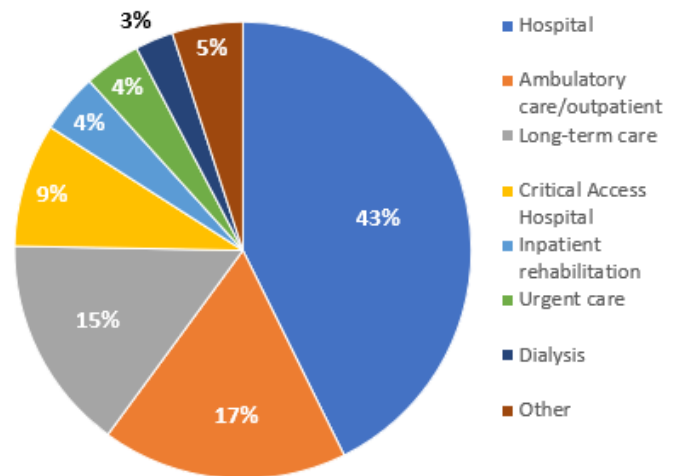
Response	Count	Percentage
Yes	794	69.59%
No	347	30.41%
Total	1141	



Indicate the primary health settings in which you work. (multiple selections allowed)

The survey represents the broad range of APIC's membership and provides insight into the experiences of many facility types, with about half of responses coming from hospital settings (hospitals and critical access hospitals) and more than 20% coming from settings that care for patients considered at high-risk during the COVID-19 pandemic (long-term care, inpatient rehabilitation and dialysis).

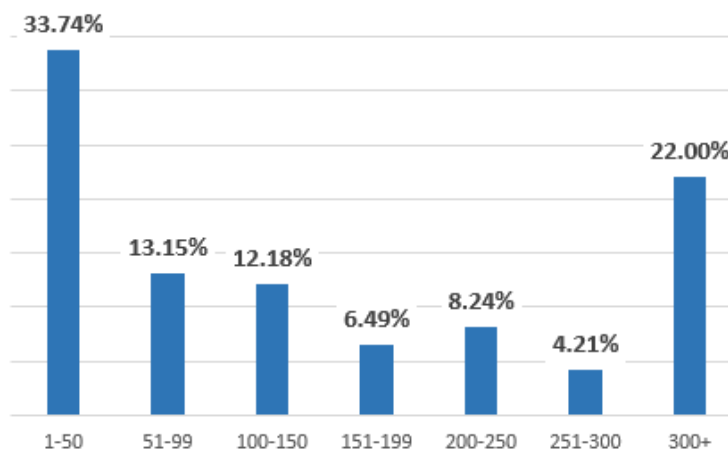
Response	Count	Percentage
Hospital	648	42.69%
Ambulatory care/outpatient	264	17.39%
Long-term care	231	15.22%
Critical Access Hospital	133	8.76%
Inpatient rehabilitation	64	4.22%
Urgent care	61	4.02%
Dialysis	41	2.70%
Other	76	5.01%
Total	1518	



Indicate the number of beds or the patient/resident capacity in your facility/system.

The largest group of respondents (33.74%) represent facilities/systems with up to 50 beds. Interestingly, the next largest group (22%) represent facilities/systems with 300+ beds.

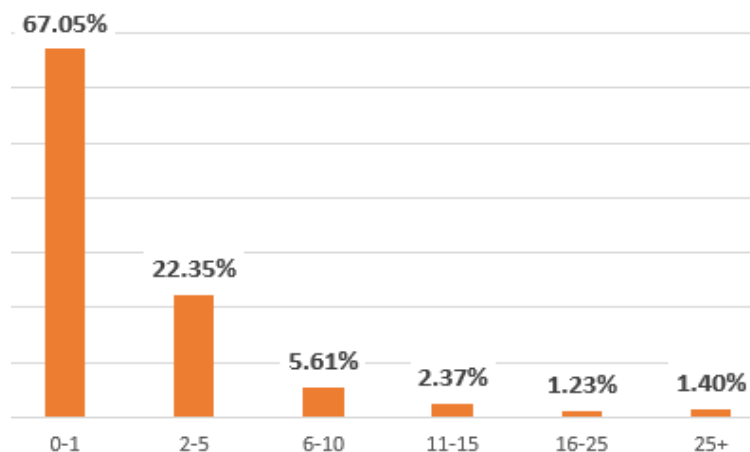
Response	Count	Percentage
1-50	385	33.74%
51-99	150	13.15%
100-150	139	12.18%
151-199	74	6.49%
200-250	94	8.24%
251-300	48	4.21%
300+	251	22.00%
Total	1141	



Number of FTE (full-time equivalent) infection preventionists in your program or department(s).

Although not surprising, given the general under-resourcing of infection prevention and control programs, this survey shows that more than two-thirds of the healthcare facilities represented have one or less than one FTE with the expertise to protect healthcare workers and patients from the spread of COVID-19. These individuals must also continue their ongoing, work to prevent the spread of healthcare-associated infections which are responsible for 687,000 infections and 72,000 deaths annually.

Response	Count	Percentage
0-1	765	67.05%
2-5	255	22.35%
6-10	64	5.61%
11-15	27	2.37%
16-25	14	1.23%
25+	16	1.40%
Total	1141	

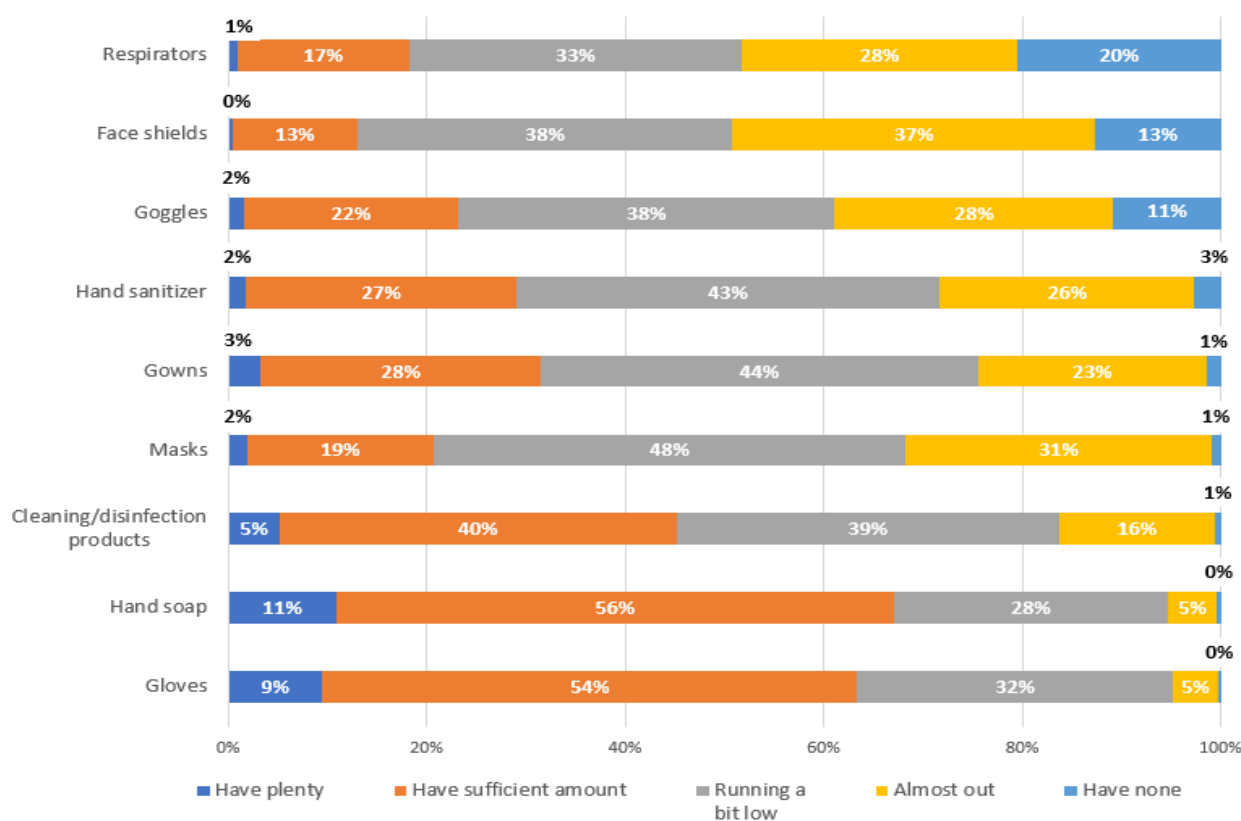


Indicate your supply of the following items by checking the appropriate box.

About two-thirds of healthcare facilities have plenty or a sufficient supply of hand soap and gloves. Interestingly, with hand-sanitizer, a supply usually ubiquitous in healthcare facilities, respondents are almost evenly split between those that say they have plenty or a sufficient amount (29%) and those who say they are almost out or have none (28%).

Similarly, nearly one-third of respondents say they have plenty or a sufficient quantity of gowns (32%), while a nearly a quarter (24%) say they are almost out of gowns or have no gowns.

On the other hand, nearly half of respondents indicated they were either almost out, or out of respirators (48%) and face-shields (49%). Nearly one-third (31%) are either almost out or out of masks. During COVID-19, if N-95 respirators are unavailable, procedure masks are recommended by CDC for those healthcare workers who are not conducting aerosol-generating procedures.



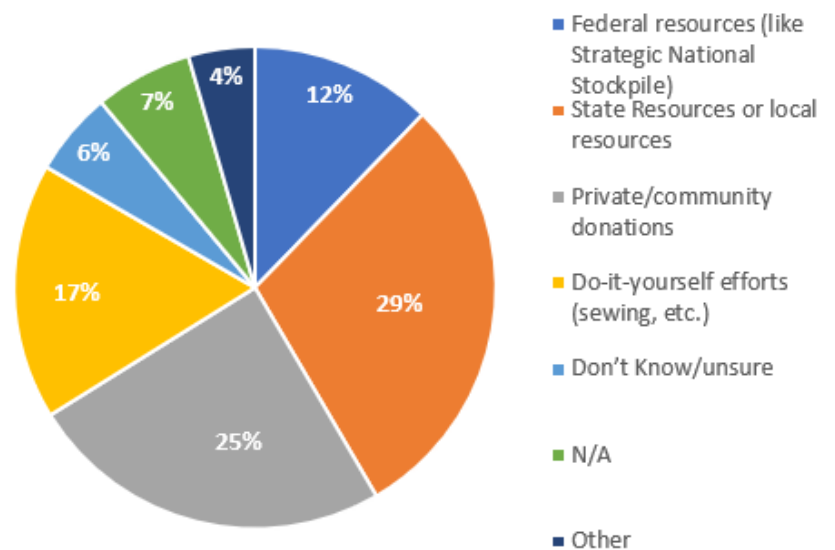
	Have plenty	Have sufficient amount	Running a bit low	Almost out	Have none
Respirators	10	198	381	317	233
Masks	22	213	543	350	11
Face shields	5	143	431	416	144
Goggles	18	246	432	320	123
Gloves	108	614	362	52	3
Gowns	37	322	501	263	16
Hand sanitizer	21	309	487	292	30
Hand soap	124	640	314	57	4
Cleaning/disinfection products	59	455	440	178	7

	Have plenty	Have sufficient amount	Running a bit low	Almost out	Have none
Respirators	0.88%	17.38%	33.45%	27.83%	20.46%
Masks	1.93%	18.70%	47.67%	30.73%	0.97%
Face shields	0.44%	12.55%	37.84%	36.52%	12.64%
Goggles	1.58%	21.60%	37.93%	28.09%	10.80%
Gloves	9.48%	53.91%	31.78%	4.57%	0.26%
Gowns	3.25%	28.27%	43.99%	23.09%	1.40%
Hand sanitizer	1.84%	27.13%	42.76%	25.64%	2.63%
Hand soap	10.89%	56.19%	27.57%	5.00%	0.35%
Cleaning/disinfection products	5.18%	39.95%	38.63%	15.63%	0.61%

How have you accessed supplemental PPE? (multiple responses allowed)

The most commonly accessed source of supplemental PPE are state and local resources, where nearly 30% of responses indicated such support. During this pandemic, it is perhaps most concerning that only 12 percent of responses indicate reliance on federal resources such as the Strategic National Stockpile. Twice as many responses (24%) indicate reliance upon private or community donations. Finally, even “do-it-yourself” efforts such as the sewing of masks represents 17 percent of the recent support in PPE, although such masks are not considered personal protective equipment in the United States.

Response	Count	Percentage
Federal resources (like Strategic National Stockpile)	250	12.25%
State Resources or local resources	599	29.35%
Private/community donations	501	24.55%
Do-it-yourself efforts (sewing, etc.)	351	17.20%
Don't Know/unsure	115	5.63%
N/A	134	6.57%
Other	91	4.46%





About the Association for Professionals in Infection Control and Epidemiology (APIC)

APIC is the professional association that represents infection preventionists (IPs) with nearly 16,000 members. APIC's mission is to create a safer world through prevention of infection.

Infection preventionists come from an interdisciplinary scientific background, prior to their specialized training in infection prevention and control. Most APIC members are educated and trained as nurses, physicians, public health professionals, epidemiologists, or medical technologists who:

- Play a pivotal leadership role in their facility's outbreak preparedness efforts.
- Adapt policies and procedures about novel organisms, such as COVID-19, in real-time based on evidence and guidelines that are changing daily.
- Educate healthcare personnel about infectious diseases and how they can remain safe while treating patients.
- Work to prevent healthcare-associated infections (HAIs) in healthcare facilities by isolating sources of infections and limiting their transmission.
- Collect, analyze, and interpret health data in order to track infection trends, plan appropriate interventions, measure success, and report relevant data to public health agencies.
- Establish scientifically based infection prevention practices and collaborate with the healthcare team to assure implementation.

Visit APIC online at www.apic.org and our COVID-19 site at <https://apic.org/covid19/>.